UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/713,441	11/14/2003	Elliot N. Linzer	03-1918 1496.00351	9611

22501 7590 07/23/2008
CHRISTOPHER P MAIORANA, PC
LSI Corporation
24840 HARPER
SUITE 100
ST CLAIR SHORES, MI 48080

EXAMINER	
KRASNIC, BERNARD	
ART UNIT	PAPER NUMBER
2624	

MAIL DATE	DELIVERY MODE
07/23/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/713,441	LINZER, ELLIOT N.	
	Examiner	Art Unit	
	BERNARD KRASNIC	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 April 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7,9-13,15,16 and 18-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7, 9-13, 15-16, and 18-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. The amendment filed 4/07/2008 have been entered and made of record.

2. The Applicant has included newly added claim(s) 22-24.

3. The application has pending claim(s) 1-7, 9-13, 15-16, and 18-24.

4. The Applicant's arguments with respect to claims 1-7, 9-13, 15-16, and 18-21 have been considered but are moot in view of the new ground(s) of rejection because the Applicant has amended independent claim(s) 1, 10, 16, and 20 respectively.

5. Applicant's arguments filed 4/07/2008 have been fully considered but they are not persuasive.

The Applicant alleges, "In particular, Vogel appears to be silent …" in page 14 through "Claims 10 further provides that the controller controls …" in page 18, and states respectively that Vogel doesn't teach the amended limitations and a few of the previous limitations. The Examiner agrees that Vogel doesn't disclose buffers receiving the same video content and that the controller isn't bidirectional. Therefore, the Examiner has introduced a new primary reference Well's (US 7,302,160 B1). See the claim rejections below for further discussions.

The Applicant alleges, "Claim 16 further provides …" in pages 18-19, and states respectively that Linzer and Arora don't teach differences in size and position between

frames. However the Examiner disagrees because Arora teaches that commercials and programs have different aspect ratio's with transitions of different sizes (see Arora, Fig. 1, ref. No.'s 115, 117, and 188, paragraph [0035], lines 8-11, paragraph [0025], lines 16-18) and therefore the black bar transitions vary in position as well, as is further taught by Linzer's T, B, L, R parameters (L and R are the number of black columns on each of the left and right edges, T and B are the number of black rows on each of the top and bottom edges and therefore the multiple parameters are the T, B, L, R which describe the number of rows and columns in the encoded inactive region / transition region).

The Applicant alleges, "Claim 20 further provides generating …" in pages 19-20, and states respectively that Arora's aspect ratio is content dependent. The Examiner disagrees because aspect ratio relates to length and width which are independent of the frames specific content [content such as color, etc.].

Therefore, the current claims are still not in condition for allowance because they are not patentably distinguishable over the prior art references as will be further discussed below in the art rejections.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1-6, 9-13, 15-16, and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Well's (US 7,302,160 B1), in view of Arora (US 2004/0114049 A1, as applied in previous Office Action) and further in view of Linzer (US 6,463,102 B1, as applied in previous Office Action).

Re Claim 1: Wells discloses a method for classifying a first video type / commercial and a second video type / program in one video signal / single video input (see Fig. 2, col. 4, lines 63-64), comprising the steps of (A) buffering said video signal in a buffer (see Fig. 2, video processors are well known in the art to consist of buffers such as RAM and ROM and other memory components, therefore video processor 140 stores the incoming video input 110a), said video signal / video input carrying a content / programs and commercials comprising a sequence of frames (see Figs. 5a-5d, col. 5, lines 1-25 and 57-60, each of the blocks or frames are indicated as a program or a communication commercial); (B) reading a first of said frames from said buffer directly to an analyzer / analyzer and video processor (140 and 152 which is essentially the detector 102) (see Figs. 2 and 5a-5d, col. 5, lines 1-25, analyzer 152 and video processor 140 [which is essentially detector 102] analyze the frames from the RAM or ROM and creates statistics such as aspect ratio changes, the aspect ratio changes is calculated between consecutive frames which shows that a first and a second frame is needed for the statistic to be calculated); (C) reading a second of said frames from said buffer directly to said analyzer / analyzer and video processor (140 and 152 which is essentially the detector 102) (see Figs. 2 and 5a-5d, col. 5, lines 1-25, analyzer 152 and video processor 140 [which is essentially detector 102] analyze the frames from the RAM or

ROM and creates statistics such as aspect ratio changes, the aspect ratio changes is calculated between consecutive frames which shows that a first and a second frame is needed for the statistic to be calculated); (D) generating in said analyzer / analyzer and video processor (140 and 152 which is essentially the detector 102) a plurality of first parameters / statistics such as aspect ratio in said first frame (see col. 5, lines 1-25, for the aspect ratio change between two frames to be calculated, a comparison of the aspect ratio of a first frame with the aspect ratio of a second frame [next in the sequence] must be processed, [see Figs. 5a-5d, each sequential consecutive block or frame is identified as a program or communication commercial using statistics such as the aspect ratio change]); (E) generating in said analyzer / analyzer and video processor (140 and 152 which is essentially the detector 102) a plurality of second parameters / statistics such as aspect ratio in said second frame (see col. 5, lines 1-25, for the aspect ratio change between two frames to be calculated, a comparison of the aspect ratio of a first frame with the aspect ratio of a second frame [next in the sequence] must be processed, [see Figs. 5a-5d, each sequential consecutive block or frame is identified as a program or communication commercial using statistics such as the aspect ratio change]), wherein said second frame follows said first frame in said content by a fixed temporal distance / sequence of expected duration (see col. 5, lines 1-25, frames are in a sequence with an expected duration [see Figs. 5a-5d, each sequential consecutive block or frame is identified as a program or communication commercial using statistics such as the aspect ratio change]); (F) comparing said first parameters with said second parameters to generate a comparison value (see Figs. 5a-

5d, col. 5, lines 1-25 and 57-60, the aspect ratio change statistic is decided by comparing the aspect ratio's of the two sequential consecutive frames in order to identify between a program content or commercial content); and (G) generating a signal / "C" or "P" (see Figs. 5a-5d, a C signal mark indicates a communication commercial block or frame and a P signal mark indicates a program block or frame) indicating (i) said first video type / communication commercial when said comparison value is greater than a predetermined threshold / change (see col. 5, lines 1-25 and 57-60, a change in the aspect ratio between two consecutive frames indicates a commercial segment sequence) and (ii) said second video type / program when said comparison value is less than said predetermined threshold / no change, wherein said predetermined threshold / aspect ratio change or no change determines if said first frame and said second frame are part of an unbroken segment in said content (see Figs. 5a-5d, col. 5, lines 1-25 and 57-60, the aspect ratio change or no change identifies a commercial or program segment sequence).

The Examiner takes Official Notice that it is exceedingly obvious to one of ordinary skill in the art at the time the invention was made to modify Well's method by including a buffer in Well's processor. This limitation is well known and typical in the image analysis field for image and signal processing using computer systems [processors consist of RAM and ROM components which act as buffers] and therefore would be an exceedingly obvious modification toward Well's method in order to broaden the applicability of Well's method.

However, Wells fails to disclose or suggest the parameters defining the transition portion between an active portion and a blank portion for the first and second frames [Well's teaches the consecutive frames as discussed above].

Arora discloses a detector which identifies areas in the single video input (105) that are changing with respect to the parameters / aspect ratio of the active region / video content (115) which is due to a shift from a program material video content to commercial material video content (see Arora, paragraph [0035], lines 8-11, paragraph [0025], lines 16-18, a comparison is made meaning that different frames [adjacent frames] are compared to determine a change in video content); the transition portion / black bar (117, 118).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Well's method using Arora's teachings by including the aspect ratio detector [which explicitly considers a transition portion] to Well's aspect ratio change statistic generator in order to further enhance the determination of a program / commercial detection using the aspect ratio parameter comparison criteria (see Arora, paragraph [0035], lines 8-11).

However, Well's as modified by Arora still fails to explicitly suggest the parameters defining the transition portion between an active portion and a blank portion for the frames.

Linzer discloses generating a plurality of parameters [number of rows and columns in the encoded inactive region] defining a transition / encoded inactive region portion between an active portion / encoded active region and a blank portion / inactive

region in said frame (see Linzer, Figs. 3 and 5, col. 3, lines 14-17, L and R are the number of black columns on each of the left and right edges, T and B are the number of black rows on each of the top and bottom edges and therefore the multiple parameters are the T, B, L, R which describe the number of rows and columns in the encoded inactive region / transition region).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify Well's method, as modified by Arora, using Linzer's teachings by including the knowledge of knowing the number of black rows and columns in the transition regions [number of black rows and columns in the different Top-T region, Bottom-B region, Left-L region, and Right-R region of the transition region] in the frame to Well's, as modified by Arora, aspect ratio statistic generator in order to ease Well's, as modified by Arora, aspect ratio statistic generator by finding the size of the active area / video content (knowing the dimensions of the parameters T, B, L, R, and the frame size, it is obvious to one of ordinary skill in the art to find the position and size of the active area [see "In the interest of advancing the prosecution …" in pages 10-11 of the Applicants arguments filed on 11/13/2007 where the applicant states it would be obvious]). The result of the Well's, Arora, and Linzer combination would be completely predictable in that Well's commercial/program detector using aspect ratio change statistics would operate using Arora's aspect ratio [which explicitly shows a transition region] which could easily be found using Linzer's parameters. The obviousness rationale advanced hereinabove is consistent with the

criteria articulated in *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385 (U.S. 2007).

Re Claim 2: Well's further discloses (i) said first video type comprises a commercial / commercial in said content and (ii) said second video type comprises a program / program in said content (see Figs. 2 and 5a-5d, col. 5, lines 1-25 and 57-60, col. 4, lines 63-64).

Re Claim 3: Linzer further discloses wherein said first parameters (Well's aspect ratio generator for a first frame as modified by Arora's aspect ratio detector) comprise (i) a first T parameter that represents a first number of top lines in said first transition portion, (ii) a first B parameter that represents a first number of bottom lines in said first transition portion, (iii) a first L parameter that represents a first number of left columns in said first transition portion, and (iv) a first R parameter that represents a first number of right columns in said first transition portion (see Linzer, Figs. 2-3 and 5, col. 3, lines 14-17, L and R are the number of black columns on each of the left and right edges, T and B are the number of black rows on each of the top and bottom edges).

Re Claim 4: Linzer further discloses said first (Well's aspect ratio generator for a first frame as modified by Arora's aspect ratio detector) transition portion comprises a plurality of pixels with no materially non-black content (see Figs. 2-3 and 5, col. 3, lines 14-17, no material non-black content is basically black content and Linzer's transition /

encoded inactive region is basically black content). Arora also discloses the transition portion / black bar [117, 118] is basically black content.

Re Claim 5: Linzer further discloses said second parameters (Well's aspect ratio generator for a second frame [next in the sequence] as modified by Arora's aspect ratio detector) comprise (i) a second T parameter that represents a second number of top lines in said second transition portion, (ii) a second B parameter that represents a second number of bottom lines in said second transition portion, (iii) a second L parameter that represents a second number of left columns in said second transition portion, and (iv) a second R parameter that represents a second number of right columns in said second transition portion (see Linzer, Figs. 2-3 and 5, col. 3, lines 14-17, L and R are the number of black columns on each of the left and right edges, T and B are the number of black rows on each of the top and bottom edges).

Re Claim 6: Linzer further discloses said second (Well's aspect ratio generator for a second frame [next in the sequence] as modified by Arora's aspect ratio detector) transition portion comprises a plurality of pixels with no materially non-black content (see Figs. 2-3 and 5, col. 3, lines 14-17, no material non-black content is basically black content and Linzer's transition / encoded inactive region is basically black content). Arora also discloses the transition portion / black bar [117, 118] is basically black content.

Although Well's, as modified by Arora and Linzer, doesn't explicitly disclose, as recited in claim 9, said video signal comprises a digital video signal, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have such a feature where the video signal is a digital video signal because Well's discusses digital recording signals and broadcasts from cable and satellite signals (see Wells, col. 1, lines 51-52, col. 2, lines 61-62), which are typical components of a digital video system.

As to claim 10, the claim is the corresponding apparatus claim to claim 1 respectively. The discussions are addressed with regard to claim 1. In regards to the specific apparatus elements, Well's as discussed above obviously teaches a buffer / video image processor (see Wells, Figs. 2-3, 160) and a first detector circuit / aspect ratio statistic generator within the video processor (see Wells, Figs. 2-3, 140, video processors are part of the CPU) and Arora discloses a second detector circuit / aspect ratio detector (see Arora, Fig. 4, 435) which does comparisons and a controller / aspect ratio controller (see Arora, Fig. 4, 430) connected bidirectionally / arrows go both directions between said first detector circuit / video processor which is part of a CPU (similar to Arora's CPU 480, Fig. 4) and said second detector circuit (see Arora, 435) and configured to control said first detector circuit and said second detector circuit.

Although the first detector circuit of Well's as modified by Arora and Linzer's (T,B,L,R) four parameters as discussed in claims 3 and 5 above is not explicitly

disclosed, as recited in claim 11, as a 4-set detector, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have such a feature of a 4-set detector because Well's detector circuit as modified by Arora and Linzer will need a 4-set detector to establish the four parameters (T,B,L,R) used in Well's, as modified by Arora, comparator to indicate the presence of a commercial.

Re Claim 12: Well's further discloses a segment detector / analyzer (142) configured to receive said second parameters following receipt of said first parameters (see Figs. 2 and 5a-5d, col. 5, lines 1-25 and 57-60, the aspect ratio statistics for the two frames are used to analyze and indicate whether the content is a program "P" segment sequence or a communication commercial "C" segment sequence).

Re Claim 13: Linzer further discloses generates said first parameters and said second parameters in response to (i) a threshold signal and (ii) one or more samples from said frames (see Linzer, col. 3, lines 14-17, these black lines are based on the threshold of a multiple of a block size and all the samples of the frame are considered).

Re Claim 15: Wells further discloses a change in said signal indicates / signal indicating commercial or program presence a transition between a first program type / commercial in said content and a second program type / television program in said content (see Figs. 5a-5d, col. 5, lines 1-25 and 57-60, the aspect ratio statistics for the two frames

are used to analyze and indicate whether the content is a program "P" segment sequence or a communication commercial "C" segment sequence).

As to claim 16, the discussions are addressed with respect to claims 1-2 and 9. Well's, as modified by Arora, aspect ratio statistics for the two frames is the size parameter and Linzer's teachings of the T, B, L, R parameters result in the outcome of generating the size and position of the truly active region [the Applicant clearly stated that one of ordinary skill in the art would have no difficulty understanding that the size and position of the active region could be calculated based on the parameters T, B, L, and R {see "In the interest of advancing the prosecution …" in pages 10-11 of the Applicants arguments}]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify Well's method, as modified by Arora, using Linzer's teachings by including the knowledge of knowing the number of black rows and columns in the transition regions [number of black rows and columns in the different Top-T region, Bottom-B region, Left-L region, and Right-R region of the transition region] in the frame to Well's, as modified by Arora, aspect ratio statistic generator in order to ease Well's, as modified by Arora, aspect ratio statistic generator by finding the size of the active area / video content (knowing the dimensions of the parameters T, B, L, R, and the frame size, it is obvious to one of ordinary skill in the art to find the position and size of the active area [see "In the interest of advancing the prosecution …" in pages 10-11 of the Applicants arguments filed on 11/13/2007 where

the applicant states it would be obvious]). The result of the Well's, Arora, and Linzer combination would be completely predictable in that Well's commercial/program detector using aspect ratio change statistics would operate using Arora's aspect ratio [which explicitly shows a transition region] which could easily be found using Linzer's parameters. The obviousness rationale advanced hereinabove is consistent with the criteria articulated in *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385 (U.S. 2007).

Re Claim 18: Wells further discloses generating a first segment signature / program "P" associated with said first frame where said scene transition represents a change from said program in said content to said commercial in said content; and generating a second segment signature / communication commercial "C" signature associated with said second frame (see Well's, Figs. 5a-5d, the aspect ratio change or no change identifies a commercial or program segment sequence, a C signal mark indicates a communication commercial block or frame and a P signal mark indicates a program block or frame).

Re Claim 19: Wells further discloses implementing a commercial advance by skipping said frames having said second segment signature / commercial; and returning from said commercial advance when said frames have said first segment signature / program (see Wells, Figs. 5a-5d, col. 3, lines 21-23).

8. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wells as modified by Arora and Linzer as applied to claims 1, 3, and 5 above, and further in view of McGee et al (US 2003/0117530 A1, as applied in previous Office Action). The teachings of Wells as modified by Arora and Linzer have been discussed above.

However, Wells as modified by Arora and Linzer fails to disclose or fairly suggest that the comparison is made by using the sum of the absolute value of the difference between parameters of two frames.

McGee discloses comparing (a) a sum of (i) a first absolute value of a first difference between said first T parameter and said second T parameter plus (ii) a second absolute value of a second difference between said first B parameter and said second B parameter plus (iii) a third absolute value of a third difference between said first L parameter and said second L parameter plus (iv) a fourth absolute value of a fourth difference between said first R parameter and said second R parameter with (b) said predetermined threshold (see Fig. 3, equation $D = \sum_{i=1}^{N} \left| H_C(i) - H_p(i) \right|$ under paragraph [0034], this equation teaches the sum of the absolute value of the difference between the parameters of two frames being used for the detection of a commercial).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify Well's method, as modified by Arora and Linzer, using McGee's teachings by including a sum of the absolute value of the difference between the parameters of the two frames to Well's comparison of aspect ratio's, as modified by Arora and Linzer, as the value to be compared to the preset

threshold in order to enhance the comparison by calculating a match and detection using a higher order algorithm.

9. Claims 20-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wells in view of Hua.

As to claim 20, the discussions are addressed with regard to claims 1-2 and 18-19. Well's teaches steps (A) [see Well's obviously teaches the buffering], (B) and (E) [see Well's, Figs. 5a-5d, col. 6, lines 58-60, a long sequence can be considered, each segment is considered to be a frame], (C) and (F) [see Well's, Figs. 5a-5d, col. 6, lines 58-60, the parameters are the aspect ratio statistics of the "P" {program} sequence segment and the "C" {communication commercial} sequence segment independent of content, aspect ratio is relative to height and width and therefore is content independent], (D) [see Wells, Figs. 5a-5d, col. 6, lines 58-60, col. 3, lines 21-23], (G) and (H) [Well's compares the aspect ratios to indicate a "P" program segment sequence or a "C" communication commercial segment sequence].

However, Well's still fails to explicitly disclose that the first and second parameters defining a signature for a first and second program segment of a first segment of said program segments.

Hua discloses that (A) the first set of parameters define a signature for a first program segment; (B) detecting the end of said first program segment; and (C) the second set of parameters define a signature for a second segment (see abstract, lines

3-6, paragraph [0005], lines 1-3, paragraph [0018], lines 10-18, paragraph [0019], Hua first extracts segments and then classifies each of the extracted segments as commercial or non-commercial events, uses segment signatures as the parameters and it is using these segment signatures that detect and define a commercial or a program segment which allow for the further process of merging and generating segments of commercial or non-commercial blocks of content through comparison with threshold criteria and in order to avoid viewing/recording commercial content).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Well's method using Hua's teachings by including to Well's aspect ratio statistic generator Hua's signature for a first and second segment parameters in order to provide a merge and generation of commercial and non-commercial blocks of content and avoid viewing/recording commercial content (see Hua, paragraph [0005], lines 1-3).

Re Claim 21: Hua further discloses said second parameters a return to said particular program segment at the end of one of said commercial segments (see abstract, lines 3-6, paragraph [0018], lines 10-18, paragraph [0019], Hua uses segment signatures as the parameters and it is using these segment signatures that detect and define a start and end of a commercial or a program segment which allow for the further process of merging and generating segments of commercial or non-commercial blocks of content through comparison with threshold criteria).

Re Claim 22: Wells further discloses determining that said first segment comprises said particular program segment prior to step (D) [see Wells, Figs. 5a-5d, col. 5, lines 1-25 and 57-60, col. 6, lines 58-60, Wells doesn't need to know where the segment ends to identify a commercial or program because it uses the aspect ratio statistics].

Re Claim 23: Wells further discloses classifying said second segment as one of said commercial segments where said first parameters and second parameters are not substantially similar (see Well's, Figs. 5a-5d, once a change in aspect ratio changes and therefore the aspect ratio of two consecutive frames are different, a commercial "C" is identified).

Re Claim 24: Wells further discloses determining whether a new scene has begun after classifying said second segment as said one of said commercial segments (see Well's, Figs. 5a-5d, once a change in aspect ratio changes and therefore the aspect ratio of two consecutive frames are different, a new scene or commercial "C" is identified).

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bernard Krasnic whose telephone number is (571) 270-1357. The examiner can normally be reached on Mon-Thur 8:00am-4:00pm and every other Friday 8:00am-3:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jingge Wu can be reached on (571) 272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jingge Wu/
Supervisory Patent Examiner, Art Unit 2624
Bernard Krasnic
July 9, 2008